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### UNITED STATES PATENT AND TRADEMARK OFFICE

### BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte RAJU ADDALA, ALOK SINGH, LEAH REED, ZEESHAN BUTT, SRINIVAS PAGADALA, CLEMENS UTSCHIG, KHANDERAO KAND, and SAGAR BOYAPATI

Appeal 2016-001829 Application 12/718,585<sup>1</sup> Technology Center 3600

Before BRUCE R. WINSOR, MICHAEL J. ENGLE, and PHILLIP A. BENNETT, *Administrative Patent Judges*.

ENGLE, Administrative Patent Judge.

### **DECISION ON APPEAL**

Appellants appeal under 35 U.S.C. § 134(a) from a final rejection of claims 1, 3, 6–12, 14, 15, 17, 18, and 20–30, which are all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

# Technology

The application relates to "order management systems to receive, process and fulfill customer orders." Spec. ¶ 2. The application specifically relates to receiving "a change request" to an existing order. Spec. Abstract.

<sup>&</sup>lt;sup>1</sup> According to Appellants, the real party in interest is Oracle International Corp. App. Br. 3.

#### Illustrative Claim

Claim 1 is illustrative and reproduced below with certain limitations at issue emphasized:

1. A non-transitory computer-readable medium having instructions stored thereon, when executed by a processor, cause the processor to orchestrate an order, the orchestrating comprising:

executing an original executable orchestration process in a regular mode, wherein the original executable orchestration process comprises one or more steps that orchestrate an order;

wherein executing the original executable orchestration process in the regular mode further comprises executing one or more steps of the original executable orchestration process;

receiving a change request while the original executable orchestration process is being executed, wherein the change request comprises a new order that references the order and further comprises one or more modifications to the order;

stopping the original executable orchestration process;

creating a new executable orchestration process that references the original executable orchestration process; and

executing the new executable orchestration process in a change mode, wherein the new executable orchestration process comprises one or more steps that orchestrate the new order;

wherein executing the new executable orchestration process in the change mode further comprises automatically adjusting one or more steps of the original executable orchestration process that have been executed; and

wherein the automatically adjusting the one or more steps of the original executable orchestration process that have been executed further comprises invoking one or more compensating services that are defined and associated with the one or more steps of the original executable orchestration process as part of a process definition of the new executable orchestration process.

## Rejections

Claims 1, 3, 6–12, 14, 15, 17, 18, and 20–30 stand rejected under 35 U.S.C. § 101 as being directed to ineligible subject matter. Final Act. 3.

Claims 1, 3, 6–9, 11, 12, 14, 15, 17, and 26–28 stand rejected under 35 U.S.C. § 102(b) as anticipated by Athavale et al. (US 6,539,386 B1; Mar. 25, 2003). Final Act. 5.

Claim 10 stands rejected under 35 U.S.C. § 103(a) as obvious over Athavale and Alexander (US 2002/0178014 A1; Nov. 28, 2002). Ans. 2.<sup>2</sup>

Claims 18–25, 29, and 30 stand rejected under 35 U.S.C. § 103(a) as obvious over Athavale and Gerrits et al. (US 2005/0102192 A1; May 12, 2005). Ans. 2.

### **ISSUES**

- 1. Did the Examiner err in concluding claim 1 is directed to ineligible subject matter under 35 U.S.C. § 101?
  - 2. Did the Examiner err in finding Athavale discloses the automatically adjusting the one or more steps of the original executable orchestration process that have been executed further comprises invoking one or more compensating services that are defined and associated with the one or more steps of the original executable orchestration process as part of a process definition of the new executable orchestration process,

as recited in claim 1?

<sup>&</sup>lt;sup>2</sup> The non-final office action (dated August 1, 2014) included rejections under §§ 101 (pp. 3–4), 102 (pp. 5–11), and 103 (pp. 12–21). Although the final office action (dated Jan. 7, 2015) did not expressly repeat the full rejections under § 103, both Appellants and the Examiner acknowledged that the § 103 rejections were maintained. *See* App. Br. 2; Ans. 2; Final Act. 13. Thus, Appellants also appeal the § 103 rejections. App. Br. 15–29.

- 3. Did the Examiner err in finding Athavale discloses "checking to see if a change is allowed for the original executable orchestration process," as recited in claim 8?
- 4. Did the Examiner err in finding Athavale and Gerrits teach or suggest "when the change request only applies to the original line executable orchestration process of the one or more original line executable orchestration processes, only the new line executable orchestration process is executed in the change mode," as recited in claim 21?

### **ANALYSIS**

Patentable Subject Matter (§ 101)

Section 101 defines patentable subject matter: "Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title." 35 U.S.C. § 101. The Supreme Court, however, has "long held that this provision contains an important implicit exception" that "[1]aws of nature, natural phenomena, and abstract ideas are not patentable." *Mayo Collaborative Servs. v. Prometheus Labs., Inc.*, 566 U.S. 66, 70 (2012) (quotation omitted). To determine patentable subject matter, the Supreme Court has set forth a two part test.

A) Step One – Whether the Claims Are Directed to an Abstract Idea "First, we determine whether the claims at issue are directed to one of those patent-ineligible concepts" of "laws of nature, natural phenomena, and abstract ideas." Alice Corp. v. CLS Bank Int'l, 134 S. Ct. 2347, 2355 (2014). A court must be cognizant that "all inventions at some level embody, use,

reflect, rest upon, or apply laws of nature, natural phenomena, or abstract ideas" (*Mayo*, 566 U.S. at 71), and "describing the claims at . . . a high level of abstraction and untethered from the language of the claims all but ensures that the exceptions to § 101 swallow the rule." *Enfish*, *LLC v. Microsoft Corp.*, 822 F.3d 1327, 1337 (Fed. Cir. 2016). Instead, "the claims are considered in their entirety to ascertain whether their character as a whole is directed to excluded subject matter." *Internet Patents Corp. v. Active Network, Inc.*, 790 F.3d 1343, 1346 (Fed. Cir. 2015).

The Examiner concludes "these claims are directed to processing and fulfilling customer orders," which is "considered to be an abstract idea inasmuch as such activity is . . . a fundamental economic practice." Ans. 3.

Appellants argue the Examiner "has failed to provide any evidence, such as a citation to a finance textbook or standard, to establish that 'processing and fulfilling customer orders' is a fundamental economic practice." App. Br. 32. Appellants further contend the claims are "not directed to an abstract idea" because they are instead "directed to a *specific application* of orchestrating an order within a distributed order orchestration system (which is a specialized computer system) and automatically adjusting steps of an executable orchestration process that is orchestrating the order when a change request (i.e., a request to change the order) is received." *Id.* at 31 (emphasis added).

We are not persuaded by Appellants' arguments. "Issues of patenteligible subject matter are questions of law and are reviewed without deference." *CyberSource Corp. v. Retail Decisions, Inc.*, 654 F.3d 1366, 1369 (Fed. Cir. 2011). "[T]he decisional mechanism courts now apply is to examine earlier cases in which a similar or parallel descriptive nature can be seen." Amdocs (Israel) Ltd. v. Openet Telecom, Inc., 841 F.3d 1288, 1294 (Fed. Cir. 2016).

Here, we agree with the Examiner that processing and fulfilling customer orders, including processing and fulfilling changes to an order, are "a fundamental economic practice long prevalent in our system of commerce." *Alice*, 134 S. Ct. at 2356 (quoting *Bilski v. Kappos*, 561 U.S. 593, 611 (2010)). If anything, processing and fulfilling customer orders is even more basic than the "risk hedging" and "intermediated settlement" at issue in *Bilski* and *Alice*. 134 S. Ct. at 2356; 561 U.S. at 611.

In *Credit Acceptance Corp. v. Westlake Services*, 859 F.3d 1044 (Fed. Cir. 2017), the Federal Circuit looked to the "background portion of the specification" as demonstrating that "processing an application for financing a purchase" was a fundamental economic practice. Here, the "Background" section of the Specification provides similar guidance in conceding that "order management systems" were known and "implemented by a number of industries." Spec. ¶ 2. The Background section also explains "a request to modify the order" was known and could be dealt with by "manual work to make the proper adjustments to the ongoing fulfillment process in order to reflect the modifications in the order." Spec. ¶ 5. Thus, Appellants seek to automate a known manual process. Yet in *Credit Acceptance*, the Federal Circuit held "mere automation of manual processes using generic computers does not constitute a patentable improvement in computer technology." 859 F.3d 1044. The same is true here. Appellants' arguments to the contrary, without more, are not persuasive of Examiner error.

B) Step Two — Whether the Claims Amount to Significantly More
In the second step, we "consider the elements of each claim both
individually and 'as an ordered combination' to determine whether the
additional elements 'transform the nature of the claim' into a patent-eligible
application." Alice, 134 S. Ct. at 2355 (quoting Mayo, 566 U.S. at 78). The
Supreme Court has "described step two of this analysis as a search for an
'inventive concept'—i.e., an element or combination of elements that is
sufficient to ensure that the patent in practice amounts to significantly more
than a patent upon the ineligible concept itself." Id. (quotation omitted).

Although Appellants argue "the claims recite <u>improvements to the</u> <u>functioning of a specific-purpose computer</u>" (App. Br. 33), we agree with the Examiner (Ans. 4–5) that the Specification expressly states "[p]rocessor 914 may be any type of general or specific purpose processor." Spec. ¶ 139.

Appellants again argue "[t]he ability to automatically adjust steps of executable orchestration processes that are currently executing in response to a change order request improves the functionality of the specific-purpose computer in handling change order requests." App. Br. 34. The Federal Circuit, however, has held that "merely configuring generic computers in order to supplant and enhance an otherwise abstract manual process is precisely the sort of invention that the *Alice* Court deemed ineligible for patenting." *Credit Acceptance*, 859 F.3d 1044 (quotations omitted).

Appellants also argue "the claimed solution is necessarily rooted in computer technology" (App. Br. 35) and the claims "solve an Internet-centric problem." Reply Br. 8. Yet other than automating a manual process, Appellants have not explained how the claimed invention could not be performed as a mental process or with a pen and a pad, such as a warehouse

worker manually following a standard operating procedure to deal with a change request. We agree with the Examiner that any improvement in the invention is to "a business solution, not a technical solution." Ans. 5.

We further agree with the Examiner that many of the specific components discussed by Appellants such as "layers" are "not recited in the claimed invention." Ans. 5.

We also are not persuaded by Appellants' argument that the claims "do not preempt all ways of processing and fulfilling customer orders." App. Br. 35. "While preemption may signal patent ineligible subject matter, the absence of complete preemption does not demonstrate patent eligibility." *Ariosa Diagnostics, Inc. v. Sequenom, Inc.*, 788 F.3d 1371, 1379 (Fed. Cir. 2015). "Where a patent's claims are deemed only to disclose patent ineligible subject matter under the *Mayo* framework, as they are in this case, preemption concerns are fully addressed and made moot." *Id*.

Accordingly, we sustain the Examiner's rejection of claim 1 under § 101, and claims 3, 6–12, 14, 15, 17, 18, and 20–30, which Appellants argue are patentable for similar reasons. *See* App. Br. 36; 37 C.F.R. § 41.37(c)(1)(iv).

# Anticipation (§ 102)

A) Claims 1, 3, 6, 7, 9, 11, 12, 14, 15, 17, and 26–28

Claim 1 recites "automatically adjusting the one or more steps of the original executable orchestration process that have been executed." Claim 1 further recites that this automatically adjusting "comprises invoking one or more compensating services that are defined and associated with the one or more steps of the original executable orchestration process as part of a process definition of the new executable orchestration process."

The Examiner finds Athavale discloses "invoking compensation services in the form of a credit check and resubmitting failed or incomplete transactions." Ans. 7 (citing Athavale 16:8–20).

Appellants contend that such actions in Athavale "do[] not <u>adjust a step of a failed or incomplete transaction</u>." App. Br. 21.

We are not persuaded by Appellants' argument. The Specification of the present application defines the claimed "compensating service": "A compensation pattern comprises one or more services that are invoked in the event of a change request for adjusting the step of the executable process. These services are defined in this application as 'compensating services.'" Spec. ¶ 211. The Specification also provides "many examples" of compensating patterns, including compensating services. For example, "a cancel/re-perform compensation pattern (also identified as a redo compensation pattern) may be provided. The cancel/re-perform compensation pattern can include . . . a re-perform service capable of re-performing the step of the executable process." *Id.* ¶ 212. In particular, "a re-perform service . . . is capable of re-performing the original step of the executable process with a current set of data," i.e., after updates from the change request. *Id.* ¶ 213.

Athavale discloses such compensating services. For example:

the change order engine 44 invokes any additional procedures that need to be invoked as appropriate depending on what fields have been changed in the current order (step 314). For example, changes to the quantity of ordered items in the change order request may require that the change order engine 44 call credit check and configuration packages. The change order janitor module functions to release expired holds and resubmits failed or incomplete transactions.

Athavale 16:8–16. Thus, even though a credit check may have been run based on the original order, Athavale discloses running an adjusted credit check if required by the changes. Such an adjusted credit check is adjusting a step of the original process and comprises a compensating service, just like the "re-perform" compensating service discussed above. Because the credit check was run as part of the original process, the credit check also was "defined and associated with" a step in the original process. The same is true for resubmitting failed or incomplete transactions. Thus, Appellants have not identified any error in the Examiner finding this limitation met.

Accordingly, we sustain the Examiner's rejection of claim 1 under § 102, and claims 3, 6, 7, 9, 11, 12, 14, 15, 17, and 26–28, which Appellants argue are patentable for similar reasons. *See* App. Br. 21–29; 37 C.F.R. § 41.37(c)(1)(iv).

## B) Claim 8

Dependent claim 8 further recites "checking to see if a change is allowed for the original executable orchestration process."

Appellants argue "Athavale describes that the evaluator 60 checks to see whether a change is allowed for the <u>original order</u>, rather than whether a change is allowed for <u>ordering application 42</u>." App. Br. 23. We agree with the Examiner, however, that "the features upon which applicant relies (i.e., an executable orchestration process being an application) are not recited in the rejected claim." Ans. 8.

Accordingly, we sustain the rejection of claim 8 under § 102.

## Obviousness (§ 103)

### A) Claim 10

Appellants contend that dependent claim 10 "is patentable for the same reasons that claim 1 is patentable" (App. Br. 23) and that Alexander "fail[s] to cure the deficiencies of Athavale." App. Br. 19–20. We are not persuaded Athavale is deficient for the reasons discussed above.

Accordingly, we sustain the rejection of claim 10 under § 103.

### B) Claim 18–20, 22, 24, 29, and 30

Appellants contend that claims 18–20, 22, 24, 29, and 30 are patentable for the same reasons as claim 1 (App. Br. 25–29) and that Gerrits "fail[s] to cure the deficiencies of Athavale." App. Br. 19–20. We are not persuaded Athavale is deficient for the reasons discussed above.

Accordingly, we sustain the Examiner's rejection of claims 18–20, 22, 24, 29, and 30 under § 103.

## C) Claims 21, 23, and 25

Dependent claim 21 recites "when the change request only applies to the original line executable orchestration process of the one or more original line executable orchestration processes, only the new line executable orchestration process is executed in the change mode." Claims 23 and 25 recite commensurate limitations.

Appellants contend "Athavale fails to disclose or suggest that the change order engine 44 determines whether a change request applies to an order or an order line." App. Br. 26.

We agree with the Examiner, however, that "[n]on-obviousness cannot be established by attacking references individually where the

rejection is based upon the teachings of a combination of references." *In re Merck & Co.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). The Examiner finds "Gerrits teaches an original line executable process[]" and states the Examiner "is relying on the combination of Athavale in view of Gerrits to teach an original line executable orchestration process and a new executable line orchestration process." Ans. 9 (citing Gerrits ¶ 83); *see also* Non-Final Act. 17 (citing Gerrits ¶ 83 as teaching the "original line executable process" in claim 18, from which claim 21 depends). Thus, Appellants have not addressed the Examiner's proposed combination that includes the teachings of Gerrits.

Accordingly, we sustain the Examiner's rejection of claims 21, 23, and 25 under § 103.

### **DECISION**

For the reasons above, we affirm the Examiner's decision rejecting (A) claims 1, 3, 6–12, 14, 15, 17, 18, and 20–30 under § 101; (B) claims 1, 3, 6–9, 11, 12, 14, 15, 17, and 26–28 under § 102; and (C) claims 10, 18–25, 29, and 30 under § 103.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. § 41.50(f).

## <u>AFFIRMED</u>